

CLEAN COPY OF REPLACEMENT CLAIMSIN THE CLAIMS:

123. (amended) A fiber optic cable installation structure comprising:

a surface defining a channel having a width of no more than 12 mm;

a cable disposed within the channel, said cable comprising a tube sized to fit within the channel and at least one optical waveguide disposed within said tube; and

a filling material overlying said cable and at least partially filling the channel, said filling material at least partially comprised of material not previously evacuated to form the channel.

124. (amended) The fiber optic cable installation structure according to Claim 123 wherein said cable has a diameter of no more than 10 mm.

125. (amended) The fiber optic cable installation structure according to Claim 123 wherein said surface defines the channel to have a width of no more than 7 mm.

126. (amended) The fiber optic cable installation structure according to Claim 125 wherein said cable has a diameter of no more than 5.5 mm.

127. (amended) The fiber optic cable installation structure according to Claim 123 wherein the surface defines the channel to have a depth of no more than 15 mm.

128. (amended) The fiber optic cable installation structure according to Claim 123 wherein said surface comprises a road surface.

129. (amended) The fiber optic cable installation structure according to Claim 128 wherein the road surface comprises a base course, a binder course disposed upon said base course and a surface course disposed upon said binder course, and wherein the road surface defines the channel through the surface course and the binder course and at least partially through the base course.

130. (amended) The fiber optic cable installation structure according to Claim 123 wherein said surface comprises a paved surface defining at least one expansion joint which serves as the channel.

By 131. (amended) The fiber optic cable installation structure according to Claim 123 further comprising a release element disposed within the channel and extending lengthwise along said cable, said filling material also overlying said release element.

132. (amended) The fiber optic cable installation structure according to Claim 131 wherein said release element is formed of a material selected from the group consisting of metal, plastic and foam rubber.

133. (amended) The fiber optic cable installation structure according to Claim 131 wherein said release element is formed of a core surrounded by an elastic coating.

134. (amended) The fiber optic cable installation structure according to Claim 133 wherein the core of said release element is at least as large as said cable.

135. (amended) The fiber optic cable installation structure according to Claim 123 further comprising an intermediate covering disposed within the channel and overlying said cable,

said filling material also overlying said intermediate covering.

136. (amended) The fiber optic cable installation structure according to Claim 135 wherein said intermediate covering comprises at least one insert selected from the group consisting of wires and sensors.

137. (amended) The fiber optic cable installation structure according to Claim 123 wherein said filling material is formed of a material selected from the group consisting of bitumen and a hot melt adhesive.

138. (amended) The fiber optic cable installation structure according to Claim 123 wherein said filling material includes a marker.

139. (amended) The fiber optic cable installation structure according to Claim 138 wherein the marker includes fibers selected from the group consisting of glass fibers and metal fibers.

140. (amended) The fiber optic cable installation structure according to Claim 123 further comprising at least one magnet disposed within the channel, said filling material also overlying said at least one magnet;

141. (amended) The fiber optic cable installation structure according to Claim 123 further comprising a device, disposed within the channel between said cable and said filling material, for holding said cable within the channel.

142. (amended) The fiber optic cable installation structure according to Claim 123 further comprising a foam at least

partially surrounding said cable, said filling material also overlying said foam.

143. (amended) The fiber optic cable installation structure according to Claim 123 further comprising a conductive cable disposed within the channel, said filling material also overlying said conductive cable.

144. (amended) A fiber optic cable installation structure comprising:

a surface defining a channel;

a cable disposed within the channel, said cable comprising a tube and at least one optical waveguide disposed within said tube;

a release element disposed within the channel and extending lengthwise along said cable; and

a filling material overlying said cable and said release element and at least partially filling the channel.

145. (amended) The fiber optic cable installation structure according to Claim 144 wherein said release element is formed of a material selected from the group consisting of metal, plastic and foam rubber.

146. (amended) The fiber optic cable installation structure according to Claim 144 wherein said release element is formed of a core surrounded by an elastic coating.

147. (amended) The fiber optic cable installation structure according to Claim 146 wherein the core of said release element is at least as large as said cable.

148. (amended) The fiber optic cable installation structure

according to Claim 144 further comprising an intermediate covering disposed within the channel between said cable and said release element.

By 149. (amended) The fiber optic cable installation structure according to Claim 148 wherein said intermediate covering comprises at least one insert selected from the group consisting of wires and sensors.

150. (amended) The fiber optic cable installation structure according to Claim 144 wherein said surface defines the channel to have a width of no more than 12 mm.

151. (amended) The fiber optic cable installation structure according to Claim 150 wherein said cable has a diameter of no more than 10 mm.

152. (amended) The fiber optic cable installation structure according to Claim 144 wherein said surface defines the channel to have a width of no more than 7 mm.

153. (amended) The fiber optic cable installation structure according to Claim 152 wherein said cable has a diameter of no more than 5.5 mm.

154. (amended) The fiber optic cable installation structure according to Claim 144 wherein the surface defines the channel to have a depth of no more than 15 mm.

155. (amended) The fiber optic cable installation structure according to Claim 144 wherein said surface comprises a road surface.

156. (amended) The fiber optic cable installation structure according to Claim 155 wherein the road surface comprises a base course, a binder course disposed upon said base course and a surface course disposed upon said binder course, and wherein the road surface defines the channel through the surface course and the binder course and at least partially through the base course.

By 157. (amended) The fiber optic cable installation structure according to Claim 144 wherein said surface comprises a paved surface defining at least one expansion joint which serves as the channel.

158. (amended) The fiber optic cable installation structure according to Claim 144 wherein said filling material is formed of a material selected from the group consisting of bitumen and a hot melt adhesive.

159. (amended) The fiber optic cable installation structure according to Claim 144 wherein said filling material includes a marker.

160. (amended) The fiber optic cable installation structure according to Claim 155 wherein the marker includes fibers selected from the group consisting of glass fibers and metal fibers.

~~161. (amended) A fiber optic installation comprising
an elongate body defining at least one lengthwise extending
duct and adapted to be disposed within a channel defined by a
surface;
at least one optical waveguide disposed within a respective
duct defined by said elongate body; and
a filling material overlying said elongate body and at least~~

9 partially filling the channel, wherein said filling material is selected from the group consisting of bitumen and a hot melt adhesive.

162. (amended) The fiber optic installation structure according to Claim 161 wherein said elongate body is sized to fit within a channel having a width of no more than 12 mm.

By 163. (amended) The fiber optic installation structure according to Claim 161 wherein said elongate body is sized to fit within a channel having a width of no more than 7 mm.

164. (amended) The fiber optic installation structure according to Claim 161 wherein said elongate body comprises a plurality of barbs for engaging walls that define the channel.

165. (amended) The fiber optic installation structure according to Claim 161 wherein said elongate body is sheathed by said filling material.

166. (amended) The fiber optic installation structure according to Claim 161 wherein said elongate body defines a slot opening into the duct.

167. (amended) The fiber optic installation structure according to Claim 166 further comprising a cable inserted into the duct via the slot, said cable comprising a tube and said at least one optical waveguide disposed within said tube.

Please cancel claim 168 without prejudice.